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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,772	07/17/2003	Bruno Richard	1509-428	9161

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EXAMINER	
SMARTH, GERALD A	

ART UNIT	PAPER NUMBER
2109	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/620,772	RICHARD ET AL.	
	Examiner	Art Unit	
	Gerald Smarth	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4/01/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. 10/620772 has a total of 27 claims pending in the application; there are 4 independent claims and 23 dependent claims, all of which are ready for examination by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Carter (5987506).

Regarding claim 1, Carter teaches a method of distributing files between computing devices of at least one group of computing devices(*Fig. 3*) including the step of performing a file reconciliation routine at periodic intervals automatically upon the networking of at least two of said computing devices.(*Carter teaches this by disclosing to reconcile two clouds fetches the other cloud's reconciliation log, which contains the set of file updates that need to be applied. Column 36 line 42-43)*

Regarding claim 2, Carter taught a method according to claim 1, as described above. Further Carter teaches the step of controlling at least one of said computing devices to transmit file reconciliation data periodically irrespective of its or their

connectivity to other computing devices. (*Carter teaches this by disclosing A system can provide, among other things, each network node 12a-12d with shared control over the structured store of data 28 and, therefore, the system 10 can distribute control of the data store across the nodes of the network; Column 6 line 52-56)*

Regarding claim 3, Carter taught a method according to claim 1, which was taught above. Carter further teaches the step of providing in said computing devices at least one shared files directory(fig 10) into which shared files are automatically stored. (*Carter discloses Fileset Creation: This operation creates a new fileset. The fileset is initially created with one file, the empty root directory. A default fileset is created automatically at the initialization of the addressable shared memory space 20; Column 10 line 6-9.)*

Regarding claim 4, Carter taught a method according to claim 3, as described above. Further Carter teaches at least one shared files directory is directly accessible by software applications stored in the computing devices. *(Carter teaches this by disclosing, Mount Export Control: Directory are attached to local devices, i.e. "mounted" using parameters stored in the Windows NT registry, or some other similar central storage area for such information. When first started up, the data control program 60 accesses the central storage and determines which filesets should be mounted; Column 10 line 23.)*

Regarding claim 5, Carter taught a method according to claim 1, as described above. Further Carter teaches including the step distributing all shared files amongst all computers networked together. *(Carter teaches this by disclosing, the clients and*

server cooperate to share data and services among the different users, and thereby the individual computers appear as a unified distributed system; Column 1 line 32-35)

Regarding claim 6, Carter taught a method according to claim 1, as described above. Further wherein all distributed files can be read from and written to in any of said computing devices. *(Carter teaches this by disclosing, locking a portion of a file for exclusive access denies all other process read and write access to the specified region of the file, and locking a portion of a file for shared access denies all other processes write access to the specified region of the file but allows other processes to read the locked region, and this means that the file system 60 must check byte range locks set on the data stream not only for lock requests but for every read or write access; Column 14 line 55-63)*

Regarding claim 7, Carter taught a method according to claim 1, as described above. Further Carter teaches including the steps of issuing file data to unspecified computers within the group and receiving file data from unspecified computers within the group. (Carter teaches this by disclosing previous timestamp(or version number) information about the state of the file when it was last reconciled, which can be used to detect concurrent updates on both clouds; Column 36 line 52-55)

Regarding claim 8, Carter teaches a method of distributing files between computing devices of at least one group of computing devices including the steps of issuing file data to unspecified computers within the group and receiving file data from unspecified computers within the group. *(Carter teaches this by disclosing as used here in, the term " Web server" means any processor which transmits data objects(such as*

Active X objects), applications (such as JAVA applets), or files (such as HTML files), to a requester via Web protocols (e.g., http or ftp); column 6 line 25-29.)

Regarding claim 9, Carter taught a method according to claim 8, as described above. Further Carter teaches including the step of accepting a computer as a computer of said at least one group on the basis of the provision of group identification data specific to the group or specific to the device. (Carter discloses when a connection between two clouds is first established, the clouds exchange three pieces of information; Column 33 line 63-65)

Regarding claim 10, Carter taught a method according to claim 8, as described above. Further Carter teaches including the step of transmitting a journal of file history for each shared file from one computer into the network. *(Carter discloses to reconcile two clouds, the reconciliation process in the master could fetches the other cloud's reconciliation log, which contains the set of file updates that need to be applied; Column 36 line 42-44.)*

Regarding claim 11, Carter taught a method according to claim 10, as described above. Carter further teaches including the step of a computing device requesting only file versions not stored therein. *(Carter disclose previous timestamp(or version number)-information about he state of the file when it was last reconciled, which can be used to current updates on both clouds; Column 36 line 52-55)*

Regarding claim 12, Carter taught a method according to claim 10, as described above. Further Carter teaches wherein a file journal includes a code indicative of the contents of each file version in the journal. (Carter discloses if the reconciliation process

determines that a fie as been created and/or modified on both sides of the link while disconnected, it will create a new ".# " extension; Column 37 line 42-45)

Regarding claim 13 Carter taught a method according to claim 8, as described above. Carter further teaches including the step of dividing files into a plurality of portions for data transfer. *(Carter discloses the file system 60 segments a data stream into a sequence of 4 kilobyte segments, each segment corresponding to a page. The file system 60 maintains two pieces of size information per data stream: the number of bytes in the data stream; and the allocation size in number of pages; Column 11 line 43-48)*

Regarding claim 14, Carter taught a method according to claim 13, as described above. Carter further teaches wherein each file portion is provided with a contents code, the method including the step of transmitting only those file portions which have been modified. (*Carter teaches this by disclosing every file system 60 has at least two data streams; the default data stream; and the Access Control List (ACL) stream; column 11 line 57-59)*

Regarding claim 15, Carter taught a method according to claim 13, as described above. Further Carter teaches including the step of providing in each computing device an accessible list of file portions stored therein and the step of determining whether a file portion required is stored therein from the list of accessible file portions. *(Carter discloses the byte-stream to segment page mapping information is part of the file metadata and is stored in a structure called data stream descriptor; Column 11 line 47-50)*

Regarding claim 16, Carter taught a method according to claim 8, as described above. Further Carter teaches including the step of storing file versions in a format in which they can be read from and written to. *(Carter discloses locking a portion of a file for exclusive access denies all other processes both read and write access to the specified region of the file and locking a portion of a file for shared access denies all other processes write access to the specified region of the file but allows other processes to read the locked region, and this means that the file system 60 must check byte range locks set on the data stream not only for lock requests but for every read or write access; Column 14 line 55-64)*

Regarding claim 17, Carter teaches a distributed file system for distributing files between computing devices of at least one group of computing devices (Fig. 3) including a file reconciliation unit operable to reconcile files between computing devices at periodic intervals automatically upon the networking of said computing devices. *(Carter discloses reconciliation is driven by the RCLid proxy mechanism, and is primarily a proxy to proxy; column 36 line 24-25)*

Regarding claim 18, Carter teaches a distributed file system for distributing files between computing devices of at least one group(fig 13) of computing devices including a transmission unit operable to issue file data to unspecified computers within the group and a receiving unit operable to receive file data from unspecified computers within the group. *(Carter discloses as used herein, the term "Web server" means any processor which transmits data objects (such as Active X objects), applications(such as JAVA*

applets), or files (such as HTML files), to a requester via Web protocols(e.g., http or ftp); Column 6 line 25-30)

Regarding claim 19, Carter teaches a computer network including a distributed file system according to claim 17 which was described above. *(Carter discloses the clients and server users, and thereby the individual computers appear as a unified distributed system; Column 1 line 32-35)*

Regarding claim 20, Carter teaches a software application for distributing files stored on or in a memory device, which software application is operable to perform the method according to claim 1. *(Carter discloses each of the data control programs 32a-32d is a software module that couples to the respective shared memory subsystem 34a-34d in a way that operates similarly to an interface between a conventional data storage program and a local memory device; column 7 line 42-47)*

Regarding claim 21, Carter teaches a method according to claim 1, including the step of transmitting a journal of file history for each shared file from one computer into the network. *(Carter discloses reconcile two clouds, the reconciliation process in the master cloud fetches the other cloud's reconciliation log, which contains the set of file updates that need to be applied; Column 36 line 42-44).*

Regarding claim 22, Carter taught a method according to claim 1, as described above. Carter also teaches including the step of dividing files into a plurality of portions for data transfer. *(Carter discloses the file system 60 segments, a data stream into a sequence of 4 kilobyte segments, each segment corresponding to a page. The file*

system 60 maintains two pieces of size information per data steam: the number of bytes in the data stream; and the allocation size in number of pages; Column 11 line 43-47)

Regarding claim 23, Carter taught a method according to claim 1, as described above. Carter further teaches including the step of storing file versions *(Carter disclose previous timestamp (or version number)-information about he state of the file when it was last reconciled, which can be used to current updates on both clouds; Column 36 line 52-55)* in a format in which they can be read from and written to. (*Carter discloses locking a portion of a file for exclusive access denies all other processes both read and write access to the specified region of the file and locking a portion of a file for shared access denies all other processes write access to the specified region of the file but allows other processes to read the locked region, and this means that the file system 60 must check byte range locks set on the data stream not only for lock requests but for every read or write access; Column 14 line 55-64)*

Regarding claim 24, Carter teaches a software application for distributing files stored on or in a memory device, which software application is operable to perform the method according to claim 8, which was taught above. *(Carter discloses each of the data control programs 32a-32d is a software module that couples to the respective shared memory subsystem 34a-34d in a way that operates similarly to an interface between a conventional data storage program and a local memory device; Column 7 line 42-47)*

Regarding claim 25, Carter teaches a computer network including a distributed file system according to claim 18, which Carter taught above. *(Carter discloses the*

clients and server users, and thereby the individual computers appear as a unified distributed system; Column 1 line 32-35)

Regarding claim 26, Carter teaches a computer network including a distributed file system operable by a method of distributing files according to claim 1, which was taught by Carter previously described above. *(Carter discloses clients and server users, and thereby the individual computers appear as a unified distributed system; Column 1 line 32-35)*

Regarding claim 27, Carter teaches a computer network including a distributed file system operable by a method of distributing files according to claim 8, which was taught by Carter as described above. *(Carter discloses clients and server users, and thereby the individual computers appear as a unified distributed system; Column 1 line 32-35)*

Conclusion

4. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See MPEP 707.05 ©

5. The following reference teaches execution of trial data.

US-2002/0010807

US-6694336

US-2004/0054711

US-6847995

US-6745233

The examiner request, in response to this Office action, support be shown for language added to any original claims on amendment and any new claim. That is indicated support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Smarth whose telephone number is (571)270-1923. The examiner can normally be reached on Monday-Friday(7:30am-5:00pm)est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerald Smarth

06/06/07

JEFFREY PWU
PRIMARY EXAMINER